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Casey Hagopian 

PATENT

Attorney Docket No. 18120-0027

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application)	<u>PATENT APPLICATION</u>
)	
Inventor(s): James D. Kafka, et al.)	
)	Art Unit: Unknown
Application No.: 10/762,216)	
)	Examiner: Not Yet Assigned
Filed: January 20, 2004)	
)	
Title Low-Gain Regenerative Amplifier System)	

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. §1.97

Commissioner for Patents
Washington, D.C. 20231

Sir:

Listed below or on an attached Form PTO-1449 is information known to applicant(s). A copy of each listed publication and U.S. and foreign patent, except for pending U.S. applications, is being submitted herewith, along with a concise explanation of information in a foreign language, if any, pursuant to 37 C.F.R. §1.97-1.98.

Applicants respectfully request that the listed information be considered by the Examiner and be made of record in the above-identified application. If form PTO-1449 is enclosed, the Examiner is requested to initial and return it in accordance with MPEP §609.

This statement is not intended to represent that a search has been made or that the information cited in the statement is, or is considered to be, material to patentability as defined in §1.56.

- ☒ This statement qualifies under 37 C.F.R. §1.97, subsection (b) because (check all that apply):
- ☒ (1) It is being filed within 3 months of the application filing date and is other than a continued prosecution application under § 1.53(d)
-- OR --
- ☐ (2) It is being filed within 3 months of entry of a national stage
-- OR --
- ☒ (3) It is being filed before the mail date of the first Office Action on the merits
-- OR --
- ☐ (4) It is being filed before the mailing of a first Office Action after the filing of a request for continued examination under § 1.114.
- ☐ 37 C.F.R. §1.97(c). If this statement is being filed after the latest of: (1) three months beyond the filing date of a national application; (2) three months beyond the date of entry of the national stage as set forth in §1.491 in an international application; or (3) the mailing date of a first Office action on the merits, but before the mailing date of the earlier of a final office action under §1.113 or a notice of allowance under §1.311, then:
- ☐ a certification as specified in §1.97(e) is provided below; or
- ☐ a fee of \$180.00 as set forth in §1.17(p) is authorized below, enclosed, or included with the payment of other papers filed together with this statement.
- ☐ 37 C.F.R. §1.97(d). If this statement is being filed after the mailing date of the earlier of a final office action under §1.113 or a notice of allowance under §1.311, but before payment of the issue fee, then:
- A. a certification as specified in §1.97(e) is completed below; and
- B. a petition under 37 C.F.R. §1.97(d) requesting consideration of this statement is submitted herewith; and
- C. a fee of \$130.00 as set forth in §1.17(i)(1) is authorized below, enclosed, or included with the payment of other papers filed together with this statement.
- ☒ *Fee Authorization.* The Commissioner is hereby authorized to charge the above-referenced fees of \$0.00 and charge any additional fees or credit any overpayment associated with this communication to Deposit Account No. 08-1641 (Docket No. 18120-0027).

Respectfully submitted,

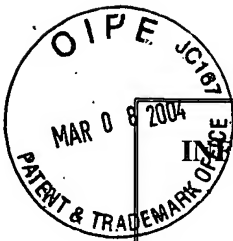
HELLER EHRMAN WHITE & MCAULIFFE LLP

Dated: 3/3/04

By: 

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INFORMATION DISCLOSURE CITATION PTO-1449		ATTY. DOCKET NO. 18120-0027		SERIAL NO. 10/762,216			
		APPLICANT Kafka et al.					
		FILING DATE 01/20/04		GROUP Unknown			
U.S. PATENT DOCUMENTS							
EXAMINER'S INITIALS	PATENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE	
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EXAMINER'S INITIALS	PATENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
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OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)							
1	Bado, P. et al., "Nd:YLF Mode-Locked Oscillator and Regenerative Amplifier"; OPTICS LETTERS; May 1987; Vol. 12, No. 5; pp. 319-321.						
1	Bagnoud, V. et al. "Diode-Pumped Regenerative Amplifier Delivering 100-mJ Single-Mode Laser Pulses"; OPTICS LETTERS; March 15, 2001; Vol. 26, No. 6; pp. 337-339.						
1	Balembois, F. et al., "High-Repetition-Rate Cw-Pumped Cr ³⁺ : LiSrAlF ₆ Femtosecond Regenerative Amplifier"; OPTICS LETTERS, Vol. 18, No. 15; August 1, 1993; pp. 1250-1252.						
1	Barty, C.J. et al., "Regenerative Pulse Shaping and Amplification of Ultrabroadband Optical Pulses"; OPTICS LETTERS; February 1, 1996; Vol. 21, No. 3; pp. 219-221.						
1	Barty, C.J. et al., "Generation of 18-fs, Multiterawatt Pulses by Regenerative Pulse Shaping and Chirped-Pulse Amplification"; OPTICS LETTERS; Vol. 21, No. 9; May 1, 1996; pp. 668-670.						
1	Beaud, P. et al., "8-TW 90-fs Cr:LiSAF Laser"; OPTICS LETTERS; Vol. 18, No. 18; September 15, 1993; pp. 1550-1552.						
1	Braun, A. et al., "Diode-Pumped Nd:Glass Kilohertz Regenerative Amplifier For Subpicosecond Microjoule Level Pulses"; APPLIED OPTICS; Vol. 36, No. 18; June 20, 1997; pp. 4163-4167.						
1	Coe, J.S. et al., "Regenerative Amplification of Picosecond Pulses in Nd:YLF:Gain Narrowing and Gain Saturation"; J. OPT. SOC. AM. B; Vol. 5, No. 12; December 1998; pp. 2560-2563.						
1	Dawson, M. et al., "Characterization of a High-Gain Picosecond Flash-Lamp-Pumped Nd:YAG Regenerative Amplifier"; OPTICS LETTERS; Vol. 13, No. 11; November 1988; pp. 990-992.						
1	Dimmick, T. "Semiconductor-Laser-Pumped, cw mode-locked Nd: Phosphate Glass Laser Oscillator and Regenerative Amplifier"; OPTICS LETTERS; Vol. 15, No. 3; February 1, 1990; pp. 177-179.						
1	Durfee, C.G. et al., "Pulse Compression in a Self-Filtering Nd: YAG Regenerative Amplifier"; OPTICS LETTERS; Vol. 17, No. 1; January 1, 1992; pp. 37-39.						
1	Evans, J.M. et al., "Kilohertz Cr: Forsterite Regenerative Amplifier"; OPTICS LETTERS; Vol. 23, No. 21, November 1, 1998; pp. 1692-1694.						
EXAMINER			DATE CONSIDERED				

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1	Fu, Q. et al., "High-Average-Power Kilohertz-Repetition-Rate Sub-100-fs Ti:Sapphire Amplifier System"; OPTICS LETTERS; Vol. 22, No. 10, May 15, 1997; pp. 712-714.						
1	Gifford, M. et al., "Diode-Pumped Nd:YLF Regenerative Amplifier"; OPTICS LETTERS; Vol. 17, No. 24; December 15, 1992; pp. 1788-1790.						
1	Hankla, A.K. et al., "Tunable Short-Pulse Beat-Wave Laser Source Operating at 1 μ m", OPTICS LETTERS, Vol. 22, No. 22; November 15, 1997; pp. 1713-1715.						
1	Hariharan, A. et al., "Alexandrite-Pumped Alexandrite Regenerative Amplifier For Femtosecond Pulse Amplification", OPTICS LETTERS, Vol. 21, No. 2, January 15, 1996; pp. 128-130.						
1	Hofer, M. et al., "Regenerative Nd:Glass Amplifier Seeded With a Nd: Fiber Laser", OPTICS LETTERS; Vol. 17, No. 11; June 1, 1992; pp. 807-809.						
1	Horvath, C. et al., "Compact Directly Diode-Pumped Femtosecond Nd: Glass Chirped-Pulse-Amplification Laser System; OPTICS LETTERS; Vol. 22, No. 23; December 1, 1997; pp. 1790-1792.						
1	Hyde, S.C.W. et al., "Argon-Ion-Pumped and Diode-Pumped All-Solid-State Femtosecond Cr:LiSrAlF ₆ Regenerative Amplifiers"; OPTICS LETTERS; Vol. 20, No. 2; January 15, 1995; pp. 160-162.						
1	Jonusauskas, J. et al., "54-fs, 1-GW, 1-kHz Pulse Amplification in Cr:forsterite"; OPTICS LETTERS, Vol. 23, No. 24, December 15, 1998; pp. 1918-1920.						
1	Joo, T. et al., "Ti:sapphire Regenerative Amplifier for Ultrashort High-Power Multikilohertz Pulses Without an External Stretcher", OPTICS LETTERS, Vol. 20, No. 4; February 15, 1995; pp. 389-391.						
1	Kawanaka, J. et al., "30mj, Diode-Pumped, Chirped-Pulse Yb:YLF Regenerative Amplifier", OPTICS LETTERS, Vol. 28, No. 21; November 1, 2003; pp. 2121-2123.						
1	Kung, A.H., "Regenerative Amplification of a Single-Frequency Optical Parametric Oscillator", OPTICS LETTERS, Vol. 18, No. 23; December 1, 1993; pp. 2017-2019.						
1	Liu, H. et al., "Directly Diode-Pumped Millijoule Subpicosecond Yb:glass Regenerative Amplifier", OPTICS LETTERS; Vol. 24, No. 13; July 1, 1999; pp. 917-919.						
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1	Liu, H. et al., "Directly Diode-pumped Yb:KY(WO4)2 Regenerative Amplifiers", OPTICS LETTERS; Vol. 27, No. 9; May 1, 2002; pp. 722-724.						
1	Mellish, R. et al., "Diode-Pumped Cr:LiSAF All-Solid-State Femtosecond Oscillator and Regenerative Amplifier", OPTICS LETTERS; Vol. 20, No. 22; November 15, 1995; pp. 2312-2314.						
1	Nabekawa, Y. et al., "Generation of 0.66-TW Pulses at 1 kHz by a Ti:sapphire Laser", OPTICS LETTERS; Vol. 23, No. 17; September 1, 1998; pp. 1384-1386.						
1	Nabekawa, Y. et al., "Sub-20-fs Terawatt-Class Laser System With A Mirrorless Regenerative Amplifier and an Adaptive Phase Controller", OPTICS LETTERS; Vol. 27, No. 14; July 15, 2002; pp. 1265-1267.						
1	Norris, T.B. "Femtosecond Pulse Amplification at 250 kHz With a Ti:sapphire Regenerative Amplifier and Application to Continuum Generation", OPTICS LETTERS; Vol. 17, No. 14; July 15, 1992; pp. 1009-1011.						
1	Ohno, K. et al., "Adaptive Pulse Shaping of Phase and Amplitude of an Amplified Femtosecond Pulse Laser By Direct Reference To Frequency-Resolved Optical Gating Traces", OPT. SOC. AM. B; Vol. 19, No. 11; November 2002; pp. 2781-2790.						
1	Perry, M.D. et al., "Cr:LiSrAlF6 Regenerative Amplifier", OPTICS LETTERS; Vol. 17, No. 8; April 15, 1992; pp. 604-606.						
1	Raybaut, P. et al., "Directly Diode-Pumped Yb ³⁺ :SrY4(SiO4)3O Regenerative Amplifier", OPTICS LETTERS; Vol. 28, No. 22; November 15, 2003; pp. 2195-2197.						
1	Reed, M. et al., "Widely Tunable Femtosecond Optical Parametric Amplifier at 250 kHz with a Ti:sapphire regenerative Amplifier", OPTICS LETTERS; Vol. 19, No. 22; November 15, 1994; pp. 1855-1857.						
1	Ribeyre, X. et al., "Nd:glass Diode-Pumped Regenerative Amplifier, Multimillijoule Short-Pulse Chirped-Pulse Amplifier Laser", OPTICS LETTERS; Vol. 28, No. 15; August 1, 2003; pp. 1374-1376.						
1	Rudd, J.V. et al., "Chirped-Pulse Amplification of 55-fs Pulses at a 1-kHz Repetition Rate in a Ti:Al2O3 Regenerative Amplifier", OPTICS LETTERS, Vol. 18, No. 23; pp. 2044-2046.						
1	Ruggiero, A.J. et al., "Regenerative Amplification of Picosecond Pulses in Nd:YAG at Repetition Rates in the 100-kHz Range", OPT. SOC. AM. B, Vol. 8, No. 10; October 1991; pp. 2061-2067.						
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1	Selker, M. D. et al., "Efficient, Diode-Pumped, Diode-Laser-Seeded, High-Peak-Power Nd:YLF Regenerative Amplifier"; OPTICS LETTERS, Vol. 19, No. 8; April 15, 1994; pp. 551-553.						
1	Song, J. et al., "Mid-Infrared Pulses Generated From the Mixing Output of an Amplified, Dual-Wavelength Ti:sapphire System"; OPTICS LETTERS; Vol. 27, No. 3; February 1, 2002; pp. 200-202.						
1	Tian, C. et al., "Synchronous, Dual-wavelength, Injection-Seeded Amplification of 5-ns Pulses in a Flash-Lamp-Pumped Ti:sapphire Laser"; OPTICS LETTERS; Vol. 24, No. 21; November 1, 1999; pp. 1496-1498						
1	Turi, L. et al., "High-Power Longitudinally End-Diode-Pumped Nd:YLF Regenerative Amplifier", OPTICS LETTERS; Vol. 20, No. 2; January 15, 1995; pp. 154-156.						
1	Vaillancourt, G. et al., "Operation of a 1-kHz Pulse-Pumped Ti:sapphire Regenerative Amplifier", OPTICS LETTERS; Vol. 15, No. 6; March 15, 1990; pp. 317-319.						
1	Wang, X.D. et al., "Regenerative Pulse Amplification In the 10-kHz Range"; OPTICS LETTERS; Vol. 15, No. 15; August 1, 1990; pp. 839-841.						
1	Wynne, K. et al., "Regenerative Amplification of 30-fs Pulses in Ti:sapphire at 5 kHz"; OPTICS LETTERS; Vol. 19, No. 12; June 15, 1994; pp. 895-897.						
1	Yamakawa, K. et al., "Two-Color Chirped-Pulse Amplification In an Ultrabroadband Ti:sapphire Ring Regenerative Amplifier"; OPTICS LETTERS; Vol. 28, No. 23; December 1, 2003; pp. 2402-2404.						
1	Yang, J. et al., "0.09-terawatt Pulses With a 31% Efficient, Kilohertz Repetition-Rate Ti:sapphire Regenerative Amplifier"; OPTICS LETTERS; Vol. 26, No. 7; April 1, 2001; pp. 453-455.						
1	Zhang, Z et al., "Dual-Wavelength Chirped-Pulse Amplification System", OPTICS LETTERS; Vol. 25, No. 8; April 15, 2000; pp. 581-583.						
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